



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/404,891	09/24/1999	PAUL H. SCOTT	0325.00273	8875

21363 7590 06/25/2004

CHRISTOPHER P. MAIORANA, P.C.  
24840 HARPER  
ST. CLAIR SHORES, MI 48080

EXAMINER
----------

BURD, KEVIN MICHAEL

ART UNIT	PAPER NUMBER
----------	--------------

2631

DATE MAILED: 06/25/2004

11

Please find below and/or attached an Office communication concerning this application or proceeding.

7

**Office Action Summary**

Application No.

09/404,891

Applicant(s)

SCOTT ET AL.

Examiner

Kevin M Burd

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9-12, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 4-8, 13-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

1. This office action, in response to the amendment filed 4/8/2004, is a non-final office action.

***Response to Arguments***

2. Applicant's arguments, see amendment, filed 4/8/2004, with respect to the rejections of claims 1-16 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of the instant application's disclosed prior art.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-3, 9-12, 21 and 22 are rejected under 35 U.S.C. 102(a) as being anticipated by Mori et al (US 4,727,541).

Regarding claims 1 and 9, figure 1 discloses a first circuit configured to present a parallel output data signal from serializer 20 in response to two or more serial data signals that are input to selectable Mux 24 and a first clock signal output from RXPLL 22 and input to deserializer 20. This clock signal will have some phase. The phase of the

clock signal will be selected by the RXPLL before outputting the clock signal. The RXPLL 22 recovers the first clock signal from the incoming serial data and presents the serial data and the recovered clock to the inputs 26 and 28 of the deserializer circuit 20 (page 3, lines 1-4). A second circuit is configured to present two or more serial data signals from switchable demux 46. The serial signals are sent to the receive circuit 12 (page 1, lines 16-17) and thereby presenting the first clock signal. These outputs are in response to a second clock signal generated by elements 40 and 42 and parallel input data input to serializer 44.

Regarding claim 2, the first clock comprises a bit clock. The first clock is generated by using the second clock and the second clock is a bit clock as shown in figure 1 of the instant application.

Regarding claim 3, the second clock comprises a reference clock. REFCLK is input at 56 in figure 1 and is used to generate the bit clock.

Regarding claim 10, figure 1 discloses a first circuit configured to present a parallel output data signal from serializer 20 in response to two or more serial data signals that are input to selectable Mux 24 and a first clock signal output from RXPLL 22 and input to deserializer 20. This clock signal will have some phase. The phase of the clock signal will be selected by the RXPLL before outputting the clock signal. The RXPLL 22 recovers the first clock signal from the incoming serial data and presents the serial data and the recovered clock to the inputs 26 and 28 of the deserializer circuit 20 (page 3, lines 1-4). A second circuit is configured to present two or more serial data signals from switchable demux 46. The serial signals are sent to the receive circuit 12

(page 1, lines 16-17) and thereby presenting the first clock signal. These outputs are in response to a second clock signal generated by elements 40 and 42 and parallel input data that is input to the serializer 44. The clock signals will control the pulse width by dividing the clock in element 40.

Regarding claim 11, the first clock comprises a bit clock. The first clock is generated by using the second clock and the second clock is a bit clock as shown in figure 1 of the instant application.

Regarding claim 12, the second clock comprises a reference clock. REFCLK is input at 56 in figure 1 and is used to generate the bit clock.

Regarding claim 21, the first clock signal will have some phase. The phase of the clock signal will be selected by the RXPLL before outputting the clock signal. This circuit comprises a phase selection circuit

Regarding claim 22, the first clock signal will have some phase. The phase of the clock signal will be selected by the RXPLL before outputting the clock signal. This circuit comprises a phase selection circuit. Numerous phases are possible for this clock signal.

#### ***Allowable Subject Matter***

4. Claims 4-8 and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mori et al (US 4,727,541) discloses the circuits shown in figures 5A and 5B. these circuits present parallel data in response to a clock and a plurality of serial data and present a plurality of serial data in response to a clock and parallel input data.

***Contact Information***

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314, (for formal communications intended for entry or for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Burd, whose telephone number is (703) 308-7034. The Examiner can normally be reached on Monday-Thursday from 9:00 AM - 6:00 PM.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3800.



Kevin M. Burd  
PATENT EXAMINER  
6/23/2004